

Pisidium mainense Sterki.

“ *ventricosum* Prime.

“ *costatum* Sterki.

“ *medianum* var. *minutum* Sterki.

“ *contortum* Prime.

“ *triangulare* Sterki.

“ *tenuissimum* Sterki.

“ *splendidulum* Sterki.

“ *splendidulum*, a new var.—Sterki.

“ *abditum*? or closely related to that species.

The following living shells were collected:

Planorbis trivolvris Say. Two specimens.

Planorbis parvus Say. Three specimens.

Anodonta fragilis Lam. One specimen.

Musculium sp.? A small form, probably a new species.

Pisidium variabile Prime.

“ *ventricosum* Prime.

“ *subrotundum* Sterki.

“ *mainense* Sterki.

“ *medianum* var. *minutum* Sterki.

“ *splendidulum* Sterki.

“ *splendidulum*, a new variety.—Sterki.

As additions to the Aroostook county shells, I might mention *Pisidium punctum* var. *simplex* Sterki. Dead water Caribou stream, Woodland. Rare and new to the county.

Pisidium milium Hald. is common in Gelot's Lake, New Sweden. Caribou, Me.

REMARKS ON THE SUBFAMILIES HYRIINÆ AND UNIONINÆ.

BY L. S. FRIERSON.

A few facts having important bearing on the classification of the *Naiades*, having come to notice, are herewith given to the readers of NAUTILUS.

Two species of the genus *Pseudodon* were obtained from Sowerby and Fulton, showing beak sculpture. *P. vondembuschiana* Lea has a somewhat doubly looped sculpture. The anterior loops curve upwards; the posterior are straighter, sloping backwards and downwards.

P. walpolei has a sculpture much like that of the *Cristarias*, being heavy bars, more or less parallel with the growth-lines.

The important fact revealed by these specimens shows that the genus must be moved from the subfamily *Hyriinæ* and placed in the subfamily *Unioninæ*.

Two species of *Parreysia* (*P. corrugata*, and *P. wynegungaensis*) were received (numerous specimens) bearing eggs in all four gills, as in *Quadrula*. That these shells would be found bearing ova in all four gills was prophesied as being probable by Mr. Simpson (Synopsis, page 508).

The important bearing of this fact is that it proves that *beak sculpture and manner of carrying ova in the gills are not correlated*.

In this connection Mr. C. T. Simpson wrote (in a letter) several years ago that gravid animals of the group of *Unio* (*Nodularia*) *caffer* Kraus proved to carry eggs in their *outer gills*, and thus necessitated the moving of this group from the subfamily *Hyriinæ*, genus *Nodularia*, to the subfamily *Unioninæ*, genus *Unio*.

But in the light of further knowledge we see that our definition of the subfamily *Hyriinæ* (as differentiated from *Unioninæ*) must be amended. We must choose between beak sculpture ("radial *versus* concentric") or marsupial characters ("Exobranchiæ *versus* Endobranchiæ") in our definitions.

The judgment of the writer would be to drop the *marsupial* feature and adhere to the beak sculpture, thus giving for our definition of the subfamily *Unioninæ*: "Essentially concentric beak sculpture," and for *Hyriinæ*: "Essentially radial beak sculpture." Thus amended, the group of *Nodularia caffer* Krauss remains undisturbed, as originally located by Mr. Simpson.

DESCRIPTIONS OF TWO NEW AMERICAN PUPIDÆ.

BY V. STERKI.

VERTIGO NYLANDERI n. sp.

Shell perforated, oblong, with a rather acute apex, of deep horn color, pellucid; whorls $4\frac{1}{2}$ -5, quite convex, with a deep suture, with sub-regular, crowded striæ (except the embryonal), the last occupying about one-half of the altitude, gradually narrowed towards the aperture, which is small; peristome slightly everted, margin not thickened; palatal wall with an indentation barely above its middle, forming a well-marked sinus and sinulus; behind it a trace of a crest, and behind that a long, deep furrow-like impression over the palatal